McKesson Corporation
One Post Street, 34th Floor
San Francisco, CA 94104
608.848.4134 Tel

Jean A. Mescher
Director, Environmental Services

[redacted]

McKESSON
Empowering Healthcare

Via Electronic and Certified Mail

June 12, 2014

Mr. Stephen Tzhone, Superfund Remedial Project Manager
Superfund AR/LA Enforcement Section (6SF-RA)
U.S. Environmental Protection Agency
1445 Ross Avenue
Dallas, Texas 75202

Subject: Monthly Progress Report – May 2014
Arkwood, Inc. Site, Omaha, Arkansas

Dear Mr. Tzhone:

Pursuant to Section IX (B) of the corrected Consent Decree in this matter, the following letter report is Millbrook Distribution Services' (MMI) monthly progress report.

I. CURRENT ACTIVITIES

The following is a general description of Work (as defined in the Consent Decree) activities commenced or completed during this reporting period:

During May, we operated the main treatment system, collected operational samples and conducted Site maintenance activities. In addition to collecting samples for laboratory analysis of pentachlorophenol, field samples were collected to measure pH, temperature and dissolved oxygen. Water samples were collected on May 19, 2014. The analytical data was forwarded electronically to you and Mr. Mark Moix of the ADEQ at an earlier date and is also attached to this report. A summary of the data is attached for reference. Samples at the spring mouth and weir will continue to be collected once per month until a reduction in frequency is approved by the agency.

A Corrected Deed Notice and Restrictions for the Arkwood Site was recorded by Mr. Bud Grisham on May 29, 2014.

II. PROJECT DATA

Attached.

9552258

III. PROJECTED ACTIVITIES

June: MMI plans to continue ongoing operations and Site maintenance activities. We were asked to delay submittal of the work plan for the dioxin reassessment sampling until we received comments from the agencies on the Revised CSM. Once we are in receipt of such comments, we will modify the CSM, as appropriate, and submit the sampling work plan.
July: MMI plans to continue ongoing operations and Site maintenance activities. Upon approval of the dioxin reassessment work plan and supplemental groundwater tracing work plan, implementation of the work plans will be scheduled.
August: MMI plans to continue ongoing operations and Site maintenance activities.

IV. PROBLEMS ENCOUNTERED OR ANTICIPATED
None.

I certify that the information contained in or accompanying this submission is true, accurate, and complete to the best of my knowledge, information and belief, and that I, as project coordinator, have made reasonable inquiry into its veracity.

If you have any questions regarding this monthly progress report, please do not hesitate to contact me at (608) 848-4134.

Sincerely,

Jean A. Mescher, Project Coordinator
Director, Environmental Services

Enclosure

Copy:
- Mark Moix, ADEQ
- EPA Assistant Regional Counsel (6C-WA) (w/o enclosure)
- Chief, Superfund Enforcement Branch (6H-E) (w/o enclosure)

Arkwood, Inc. Site: Ozone Injection Pilot Study

	Variables		Spring	PCP	
Date	Water Inj	O3 Inj	Flow	Mouth	Weir
12/8/05			5		
12/9/05	35		5		
12/14/05	35	1lb/10 g	21	28	
12/15/05	35	1lb/10 g	30/27	29.3	
12/20/05	36	1lb/10 g	27	7.39	<5.10
12/26/05	36	1lb/10 g	27	11.4	11.1
1/2/06	36	1lb/10 g	21	42.4	35.1
1/9/06	36	1lb/10 g	20	32.4	33
1/16/06	36	1lb/10 g	27.5	32.3	<5.00
1/23/06	36	1lb/10 g	34/32	15.9	<5.00
1/30/06	36	1lb/10 g	41	34.3	<5.00
2/6/06	36	1lb/10 g	38	<5.10	<5.00
2/13/06	36	1lb/10 g	34	23.9	<5.00
2/20/06	36	1lb/10 g	21	5.53	4.19J
2/27/06	36	1lb/10 g	26	19.9	<5.00
3/6/06	34	1-2lb/10 g	16	25.1	<5.00
3/13/06	33	1-2lb/10 g	57	107	<5.00
3/20/06	32	1-2lb/10 g	48	26.2	<5.00
3/27/06	32	1-2lb/10 g	27	4.09J	<5.00
4/3/06	34	2-3lb/10 g	24	11.3	<5.00
4/10/06	33	2-3lb/10 g	16.4	39.3	<5.00
4/17/06	34	2-3lb/10 g	22	7.94	7.82
4/24/06	35	2-3lb/10 g	16	7.0	<5.00
4/27/06	33	2-3lb/10 g	50	11.3	NA
4/29/06	33	2-3lb/10 g	193	28.2	NA
5/1/06	33	2-3lb/10 g	94	23.4	7.16
5/8/06	33	2-3lb/10 g	59	52.3	23.3
5/15/06	34	2-3lb/10 g	21.7	14.9	<5.00
5/22/06	34	2-3lb/10 g	16	<5.00	<5.00
5/30/06	34	2-3lb/10 g	16.7	5.64	<5.00
6/7/06	0	0	3	253	<5.00
6/12/06	0	0	2.19	LE	LE
6/19/06	34	0	16.7	52.1	14.3
6/26/06	34	0	16.7	74.7	<5.00
7/5/06	35	0	21.7	9.8	<5.00
7/17/06	34	0	16.7	21.9	4.01J
8/7/06	34	0	16.7	23.6	18
8/14/06	34	0	16.7	<5.00	5.22
9/5-6/06	34	0	23	6.57	<5.10
9/18/06	34	0	24	6.29	<5.00
10/2/06	34	0	24	16.8	<5.00
10/16/06	34	2-3lb/10 g	41	39.6	2.22J
10/16/06	34	5-6lb/10g	81	92.3	19.4
10/18/06	34	5-6lb/10g	27	118	<5.00
11/7/06	35	2-4lb/10g	41	52.7	4.70J
11/20/06	35	2-4lb/10g	24	57.4	<5.00
11/30/06	35	5-6lb/10g	636	<50.0	<5.00
12/4/06	35	5-6lb/10g	59	<54.3	<5.00
12/6/06	35	5-6lb/10g	37	<52.6	<5.00
12/18/06	35	2-3lb/10 g	21	24.1	<5.00
1/8/07	35	2-3lb/10 g	21	16.7	<5.00
1/22/07	35	2-3lb/10 g	79	34.6	<5.00
2/5/07	35	2-3lb/10 g	27	25.9	<5.00
2/19/07	35	2-3lb/10 g	47	19.6	<5.00
3/5/07	35	2-3lb/10 g	27	<5.00	<5.00
3/19/07	35	2-3lb/10 g	25	NA	NA
4/9/07	35	2-3lb/10 g	23	<5.00	<5.00
4/23/07	35	2-3lb/10 g	30	7.27	<5.00
5/7/07	35	2-3lb/10 g	21	2.90J	<5.00
5/21/07	35	2-3lb/10 g	20	4.36J	<5.00
6/4/07	35	2-3lb/10 g	20	<5.00	<5.00
6/18/07	35	0	21	9.62	<5.00
7/9/07	35	0	20	15.0	<5.00

7/23/07	35	0	18	8.65	<5.00
8/6/07	0	0	1	191	9.19
9/10/07	35	0	23	217	26.4
9/24/07	35	0	18	16.2	19.4
10/10/07	35	2-3lb/10 g	18	5.63	1.15J
10/22/07	35	2-4lb/10g	18	1190	53.7
11/5/07	35	2-4lb/10g	18	209	7.93
11/19/07	35	2-4lb/10g	18	19.8	24.1
12/3/07	35	2-4lb/10g	18	20.1	<5.00
12/17/07	36	2-4lb/10g	32	87.4	1.20J
1/7/08	36	2-4lb/10g	23	<5.00	<5.00
1/21/08	36	2-4lb/10g	23	58	<5.00
2/4/08	36	2-4lb/10g	24	52	<5.00
2/18/08	35	2-4lb/10g	83	57	15
3/3/08	35	5-6lb/10g	580	<5.00	<5.00
3/17/08	35	5-6lb/10g	44	11	<5.00
4/7/08	35	5-6lb/10g	78	10	<5.00
4/12/08	35	5-6lb/10g	240	6.5	NA
4/13/08	35	5-6lb/10g	100	6.8	NA
4/14/08	35	5-6lb/10g	78	8.2	NA
5/10/08	36	5-6lb/10g	68	75	<5.00
5/27/08	0	0	18	189	<5.00
6/9/08	35	2-4lb/10g	30	77	<5.00
6/23/08	35	2-4lb/10g	580	5.6	<5.00
7/7/08	35	2-4lb/10g	80	194	189
7/10/08	35	5-6lb/10g	140	254	20
7/21/08	35	5-6lb/10g	42	477	<5.00
8/4/08	35	2-4lb/10g	22	108	14
8/18/08	35	2-4lb/10g	36	31	<5.00
9/1/08	35	2-4lb/10g	25	32	<5.00
9/22/08	35	2-4lb/10g	40	22	<5.00
10/6/08	35	2-4lb/10g	21	20	<5.00
10/20/08	33	2-4lb/10g	21	13	<5.00
11/3/08	35	2-4lb/10g	24	<5.00	<5.00
11/17/08	35	2-4lb/10g	30	28	<5.00
12/1/08	35	2-4lb/10g	24	12	<5.00
12/22/08	33	2-4lb/10g	24	<5.00	<5.00
1/5/09	35	2-4lb/10g	32	7.3	<5.00
1/26/09	32	2-4lb/10g	27	<5.00	<5.00
2/9/09	33	2-4lb/10g	90	<5.00	<5.00
2/23/09	33	2-4lb/10g	31	6	<5.00
3/9/09	34	2-4lb/10g	30	5.7	<5.00
3/23/09	33	2-4lb/10g	30	<5.00	<5.00
4/6/09	32	2-4lb/10g	38	5.8	<5.00
4/20/09	32	2-4lb/10g	243	8.5	<5.00
5/4/09	33	2-4lb/10g	343	8.2	8.7
5/18/09	33	2-4lb/10g	51	6.2	<5.00
6/8/09	35	2-4lb/10g	38	<5.00	<5.00
6/29/08	33	2-4lb/10g	25	9.1	<5.00
7/20/09	32	2-4lb/10g	47	39	<5.00
8/10/09	32	2-4lb/10g	23.7	31	<5.00
9/13/09	32	0	22	8	<5.00
10/12/09	32	0	104	21	<5.00
11/9/09	32	0	45	<50	<5.00
12/7/09	32	0	28	8.2	<5.00
1/10/10	32	0	42	13	<5.00
2/15/10	32	0	87	11.1	<5.00
3/15/10	32	0	35	<5.00	<5.00
4/15/10	32	0	40	9.62	<5.00
5/17/10	32	0	180	11	<5.00
6/13/10	32	0	43	15	<5.00
7/8/10	32	0	33	66	<2
8/19/10	0-20	0	17	16.3	<5.00
9/21/10	34	0	33	28.2	<5.00
10/18/10	37	0	20	14.9	<10.00
11/20/10	37	0	21	4.89	<4.00
12/16/10		0	23.55	6.15	<5.00

1/18/11	37	0	22.83	3.39	2.86
2/9/11	37	0	26.76	10.4	<10.0
3/17/11	37	0	49.03	14.2	<5.00
4/19/11	37	0	57.55	12.5	<5.00
5/2/11			310	11	
5/3/11			271	8.92	
5/4/11			156	10.8	
5/4/11			123	15.8	
5/5/11			83	18	
5/9/11	37	0	33.91	43.8	<5.00
6/9/11	0	0	6.8	52.4	<5.00
7/18/11	0	0	0.575	18.6	<5.00
8/15/11	0	0	1.004	38.9	<5.00
9/13/11	0	0	0.132	<5.00	<5.00
10/18/11		0	23.71	52.4	<5.00
11/16/11		0	29.64	30.6	<5.00
12/19/11		0	60.25	11.5	<5.00
1/19/12	40	0	31.82	<5.00	<5.00
2/14/12	40	0	40.38	6.68	<5.00
3/29/12	40	0	50.81	7.95	<5.00
4/18/12	40	0	22.54	20	<5.00
5/23/12	40	0	18.18	10.9	<5.00
6/11/12	40	0	17.87	7.13	<5.15
7/30/12	40	0	15.1	5.68	<5.00
8/24/12	40	0	13.75	<5.00	<5.00
9/24/12	0	0	0.4	73.2	<5.00
10/15/12	0	0	4.48	26.7	<5.00
11/19/12	0	0	0.73	28.8	<5.00
12/28/12	0	0	1.22	25	<1.00
1/16/13	0	0	3.72	40.5	2.12
2/24/13	0	0	4.1	45.3	<1.00
3/13/13	0	0	23	18.6	<1.00
4/22/13	0	0	21.62	26.7	<1.00
5/16/13	0	0	14.33	18.3	<1.00
6/21/13	0	0	1.44	22.3	<1.00
7/23/13	0	0	0.934	27.1	<1.00
8/23/13	0	0	5.27	65.4	<1.00
9/18/13	0	0	1.43	54.6	<1.00
10/16/13	0	0	1.63	66.1	<1.00
11/13/13	0	0	2.68	115	1.71
12/18/13	0	0	43.77	33	1.28
1/13/14	0	0	48.39	45.8	2.55
2/17/14	0	0	6.1	75.4	<1.00
3/17/14	0	0	151.5	12.8	2.47
4/23/14	0	0	11.26	49.4	<1.00
5/19/14	0	0	56.62	73.9	<1.00

Weir Parameters

pH	Temp	DO %	Distance	
7.46	17.57	341.9	12	
7.07	16.08	216.4	15	
7.85	15.4	209.1	12	
7.91	12.46	247.6	12	
6.41	13.08	241.1	12	
6.71	14.26	256.3	12	
7.63	14.02	190.7	12	
6.72	14.36	214.3	12	
6.52	14.66	226.8	12	
6.69	18.26	238	12	
7.76	19.74	249.7	12	
6.92	18.33	238.2	12	
7.72	18.85	196.5	12	
8.03	15.9	204.7	12	
7.25	11.72	236.4	12	
6.65	13.99	25.92*	12	measured as mg/L not as % DO
7.13	12.36	236.7	12	
6.47	13.61	259.6	12	
7.1	13.4	121.6	12	Very heavy flow rate
6.36	14.88	218.7	12	
7.34	15.97	219.1	12	

NOTES: Flow rates in gallons per minute (gpm)
O3 injection rates in pounds per 10 gallons
PCP concentrations in parts per billion (ppb)
NA - not analyzed
LE - Lab Error - samples not usable

Arkansas Analytical Inc.

11701 I-30 Bldg 1, Ste 115 - Little Rock, AR 72209
501-455-3233 Fax 501-455-6118

23 May 2014

Jim Fleer
Oxford Environmental & Safety, Inc
14348 Nieman Rd.
Overland Park, KS 66221

RE: Arkwood Monthly Sampling

SDG Number: 1405259

Enclosed are the results of analyses for samples received by the laboratory on 20-May-14 10:22. If you have any questions concerning this report, please feel free to contact me.

Sample Receipt Information:

Custody Seals	✔
Containers Correct	✔
COC/Labels Agree	✔
Received On Ice	✔
Temperature on Receipt	3.0°C

Sincerely,

Norma James / Teresa Cains

Norma James
President

23 May 2014

Jim Fleer
Oxford Environmental & Safety, Inc
14348 Nieman Rd.
Overland Park, KS 66221
Project: Arkwood Monthly Sampling

Date Received: 20-May-14 10:22

CASE NARRATIVE

Sample Delivery Group – 1405259

One or more of the qualifiers described below may appear in this report.

QUALITY CONTROL QUALIFIERS:

Qualifier	Description
E20	Sample used as "parent" for the associated analytical batch.
%D3/S-01 / E1	Surrogate failed to recover within acceptance criteria (%D3/S-01). Results associated with this surrogate were qualified as "estimated" (E1).
B	Present in the Associated Blank
B1	Present in Blank, but Not In the Sample.
%D2 / E5	Laboratory Control Spike (LCS) and/or Laboratory Control Spike Duplicate (LCSD) failed to recover with acceptance criteria (%D2). Associated results were qualified as "estimated" (E5).
%D1	Matrix Spike (MS) and/or Matrix Spike Duplicate (MSD) failed acceptance criteria.
MBA	Matrix Spike (MS) and/or Matrix Spike Duplicate (MSD) failed criteria due the high concentration of analyte in the parent sample.
MBI	Matrix Spike (MS) and/or Matrix Spike Duplicate (MSD) failed criteria due an interference in the parent sample.
%D3	Quality Control Surrogate failed acceptance criteria.

23 May 2014

Jim Fleer
Oxford Environmental & Safety, Inc
14348 Nieman Rd.
Overland Park, KS 66221
Project: Arkwood Monthly Sampling

Date Received: 20-May-14 10:22

ANALYTICAL RESULTS

Lab Number: 1405259-01
Sample Name: Mouth
Date/Time Collected: 5/19/14 13:35
Sample Matrix: Water

Semivolatiles	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
Pentachlorophenol	ug/L	**73.9**		5/20/14 16:11	A405222	8270D
2,4,6-Tribromophenol [surr]	%	111		5/20/14 16:11	A405222	8270D
2-Fluorophenol [surr]	%	62.4		5/20/14 16:11	A405222	8270D
Phenol-d5 [surr]	%	40.9		5/20/14 16:11	A405222	8270D

ANALYTICAL RESULTS

Lab Number: 1405259-02
Sample Name: Weir
Date/Time Collected: 5/19/14 13:15
Sample Matrix: Water

Semivolatiles	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
Pentachlorophenol	ug/L	< 1.00	E1	5/20/14 16:32	A405222	8270D
2,4,6-Tribromophenol [surr]	%		%D3	5/20/14 16:32	A405222	8270D
2-Fluorophenol [surr]	%	3.21	%D3	5/20/14 16:32	A405222	8270D
Phenol-d5 [surr]	%	0.120	%D3	5/20/14 16:32	A405222	8270D

23 May 2014

Jim Fleer
Oxford Environmental & Safety, Inc
14348 Nieman Rd.
Overland Park, KS 66221
Project: Arkwood Monthly Sampling

Date Received: 20-May-14 10:22

QUALITY CONTROL RESULTS

Semivolatiles - Quality Control
Analyzed: 20-May-14 14:47 By: TB

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch A405222 - 3510C Modified										
Blank (A405222-BLK1)				Prepared & Analyzed: 20-May-14						
Pentachlorophenol	ND	1.00	ug/L							
Surrogate: 2,4,6-Tribromophenol	*43.0*		"	*40.0*		*107*	*45.3-139*			
Surrogate: 2-Fluorophenol	*25.3*		"	*40.0*		*63.4*	*28.9-81.6*			
Surrogate: Phenol-d5	*18.0*		"	*40.0*		*44.9*	*8.43-107*			
LCS (A405222-BS1)				Prepared & Analyzed: 20-May-14						
Pentachlorophenol	37.3	1.00	ug/L	40.0		93.3	44.6-120			
Surrogate: 2,4,6-Tribromophenol	*47.1*		"	*40.0*		*118*	*60.1-131*			
Surrogate: 2-Fluorophenol	*25.3*		"	*40.0*		*63.3*	*30.7-98.1*			
Surrogate: Phenol-d5	*17.7*		"	*40.0*		*44.3*	*22.7-123*			
Matrix Spike (A405222-MS1)	**Source: 1405259-01**			Prepared & Analyzed: 20-May-14						
Pentachlorophenol	139	2.00	ug/L	80.0	73.9	81.1	31-128			
Surrogate: 2,4,6-Tribromophenol	*85.5*		"	*80.0*		*107*	*43-136*			
Surrogate: 2-Fluorophenol	*47.8*		"	*80.0*		*59.8*	*23.6-97.1*			
Surrogate: Phenol-d5	*34.6*		"	*80.0*		*43.2*	*12.8-122*			
Matrix Spike Dup (A405222-MSD1)	**Source: 1405259-01**			Prepared & Analyzed: 20-May-14						
Pentachlorophenol	145	2.00	ug/L	80.0	73.9	89.4	31-128	4.70	22.7	
Surrogate: 2,4,6-Tribromophenol	*88.1*		"	*80.0*		*110*	*43-136*			
Surrogate: 2-Fluorophenol	*50.7*		"	*80.0*		*63.4*	*23.6-97.1*			
Surrogate: Phenol-d5	*34.6*		"	*80.0*		*43.2*	*12.8-122*			

QUALIFIER(S)

*%D3: Surrogate Percent Recovery Does Not Meet Laboratory Acceptance Criteria
*E1: Estimated Result Due to Surrogate Failure

All Analysis performed according to EPA approved methodology when available:
SW 846, Revised December, 1996; EPA 600/4-79-020, Revised March, 1983; Standard Methods.
Instrument calibration and quality control samples performed at or above frequency specified in analytical method.

Reviewed by: Norma James / Teresa Coins

Norma James and/or Teresa Coins
Technical Director and/or QA Officer

Arkansas Analytical Inc.
11701 Interstate 30, Bldg. 1, Ste. 115
Little Rock, AR 72209
PHONE: 501-455-3233
FAX: 501-455-6118

CHAIN OF CUSTODY RECORD

CLIENT INFORMATION	Project Description	Turnaround Time	Preservation Codes:
Oxford Environmental & Safety, Inc.	Arkwood Monthly Sampling	1 Day (100%)	1. Cool, 4 Degrees Centigrade; 4. Thiosulfate for Dechlorination
14348 Nieman Rd.		2 Day (50%)	2. Sulfuric Acid (H_2SO_4), pH < 2; 5. Hydrochloric Acid(HCl)
Overland Park KS 66221	Reporting Information	3 Day (25%)	3. Nitric Acid (HNO_3), pH < 2; 6. Sodium Hydroxide (NaOH), pH > 12
	Telephone: 913-706-3422	5 Day (Routine)	
Attn: Jim Fleer	Email: jfleer@oxfordeands.com	Preservative Code:	1
		Bottle Type:	GA

Sample(s) Signature: James E. Fleer

Sampler(s) Printed

Field Number	SAMPLE COLLECTION Date/s	Time/s	Grab	Comp	Number of Bottles	Sample Matrix	SAMPLE IDENTIFICATION/ DESCRIPTION	Pentachlorophenol (8270D)	Bottle Type Code	Arkansas Analytical Work Order Number: 1405259
	5/19/2014	13:35	X		2	Water	Mouth	X	G	01
	5/19/14	13:15	X		2	Water	Weir	X	G	02

ONSITE MEASUREMENTS BY Oxford Environmental

	pH	Temperature	DO%
Mouth	6.66	13.66	35.9
Weir	7.34	15.97	219.1

1. Relinquished by: (Signature)	Date/Time	2. Received by: (Signature)
	5/19/2014 14:00	UPS
3. Relinquished by: (Signature)	Date/Time	4. Received by lab: (Signature)
UPS	5/20/14 1022	Amanda Jobush

SAMPLE CONDITION UPON RECEIPT IN LAB

1. CUSTODY SEALS:	√ Yes	No
2. CONTAINERS CORRECT:	Yes	No
3. COC/LABELS AGREE:	Yes	No
4. RECEIVED ON ICE:	Yes	No
5. TEMPERATURE ON RECEIPT:	3°C	
6. TEMPERATURE GUN ID:	HHT#2	

FOR COMPLETION BY LAB ONLY

REMARKS / SAMPLE COMMENTS

Flow Rate - 56.62
O_3 Power - 25%
O_3 Conc - 2.46%
O_3 Residual - 3.03

Revision 2
2/14/14